

#

AGGGAGAGTCTGCCACAAGTTTGATATTTCTCACTGAGGCATCTATTGAGGGCAGCAGACA  
 CTGAGCAGAACGTAGCACGGCAATGCTGGTAGCAATGCCTGTCGGCCAGCACTCAGAAGACGGAGGCA  
 GGAGAACATAGCTTCCAGTCAGCCTCTTACAATATAGTCAGTTGGAAAGTCAGCCAGCTTAGACAACA  
 TGGAGAGCCTGTGCCAAAGCCACTGGGTAAGGCCAATCTCAGTAGCAGAGAGCTGCCAGGGTGCCTA  
 CTGC : AAAAAAAAACCTCAAACAACAGAACAGTAGGGAGGTGAAATAAAGTGTAGGGGGTGGATTAA  
 AGCTGATGTGGACTTCAAATAAAGTTACCTTTAGATACCTATTAAATCAATAGCATAGACCTGAAAC  
 TGTCTATCAGAAAATGTGTCTATTCTGAGGAAGGAGTGCCTAACGAGGTTCTGTGAGGGGGCTCTGGCT  
 TTGAGAGGGTGTACCATCACATAAGACTCTAAAAGCACATACTTTATAAATTCAACCAGTACAGCTTAA  
 ATCTTCTTGTCAATTGCAACTGAGCCATGGAGTCCTCGATGCTGACACCAATTCAACTGACCTACA  
 CTCACGGCCTCTGTTCAACCCCAAGACATTGCCTCCATGGCATTCTGGTCTCACTTGTCTATTGGGA  
 CTGCTAGGCAATGGCTGGTGTGGTAGCTGGCTAAAGATGAAGACGACCGTGAACACAGTCTGGT  
 TCCTCCATCTCACCCGGCCATTCTGCTGCCCTCCCTGGCTCACCTGATTCT  
 CCAAGGACACTGGCCCTATGGCTTGTGCAAACATTATCCCATCCATTATTCTAACATGTT  
 GCCAGTGTCTCCTGCTTACTGCCATTAGCCTGGACCGATGCTGATAGTACATAAGCCAATCTGGGCC  
 AGAACATCGAAACGTGAGAACCGCTTCGCATCTGGATGTGCTGGTAGCTTGTGATGTG  
 TGTGCCCCTATTGTATACCGTATCTGTTCAATTGGACAATCGCAGTATATGTAGATATAATTGAT  
 TCCTCCAGGTATATGATTATTGGACTACGTGTACAAACTAAGTCTACCAGAAAGCAATTCTACTGATA  
 ACTCCACTGCTCAGCTAACGGACATATGAATGACAGGTCAGCTCCCTCTGTACAGGCAAGGGATTA  
 CTTTGGACAGTTACCACTGCCCTCAGTCACAGCCATTCTAACATCTCTGAAAGACTCATTCTCTA  
 GATTCAAGAACCAACAACCCATTATGGGAAAGCCTCTAACATGCTCTCACAGCCGGTACCCAGCG  
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 AGACAATTTGGCAACTCTCAGAGAAAGTCTTATTGACATCAGCATCTTGTGAAACATTAAGATG  
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 TTGTTTCCATCAGTGTAAAGTTTACCTCATGGCTTAGTCTATTCCATCCCTGACTACACCATGTG  
 AATGAATAACTTTTACATCTGTTTCAGTATTCTTTCTTAGCATCATCTAAACTCTAGTTG  
 CATGGAAGGCTGCTTATTGTTCTGAATGGAAGATATTCAATTATTGACAGTGTGTTGAGG  
 GTGATTTTAAGGGGAAAGAGACACAGTAAGAAAAGATCTATGAAAGCAGGGAGTGTGAGTTAGAGT  
 TTGACAGAACACAGTGCCAAATGCCACCCACTAAAAGCAACCTGAGATAATTCCAGTGTGAGCA  
 AGTGAGCACAGATAACACATAAACACTTCCACTCCTGGAGTGTAGCTTGTAGCTGGAGCTC  
 (SEQ ID NO:1)

MESFDADTNSTDLSRPLFQPQDIASMVILGLTCLLGLNGLVLWAGVKMKTIVNTVFLHLLADFLCC  
 LSLPSLAHLILQGHWPYGLFLCKLIPSIIINMFASVFLTAISLDRCLIVHKPIWCQNHRNVRTAFAICGVW  
 VAFVMCPVFVYRDLIMDNRSCRYNFDSRSYDYWDYVYKLSLPESNSTDNSTAQLTGHMNDRSAPSSV  
 QARDYFWTVTTALQSQPFLTSPEDSFSLDSANQQPHYGGKPPNVLTAAVPSGFPVEDRKSNTLNADFLSA  
 HTELFPTASSGHLYPYDFQGDYDQFTYDNHVPTPLMAITIRLVGFLVPFFIMVICYSIVFRMRKTNFTKS  
 RNKTFRVAVAATVFFICWTPYHLGVLLITDPESSLGEAVMSWDHMSIALASANSFCNPFLYALLGKDFRK  
 KARQSIKGILEAAFSEELTHSTNCTQDKASSKRNNMSTDV (SEQ ID NO:2)

**FIGURE 1**

underlined = deleted in the targeting construct (SEQ ID NO:5)

[ ] = sequence flanking Neo insert in targeting construct (SEQ ID NO:6 and SEQ ID NO:7)

AGGGAGAGTCTGCCACAAGTTTGATATTCACAGGGCATCTATTCAAGTTGG  
 GCAGCAGACACTGAGCAGAACGCTAGCACGGCAATGCTGGTAGCAATGCCTGTCCGGCCA  
 GCACTCAGAAGACGGAGGCAGGAGAACATAGCTTCCAGTCAGCCTCTTCTACAATATA  
TCAGTTGGAAGTCAGCCAGCTTAGACAACATGGAGAGCCTGT [GCCGAAAGCCACTGGGT  
AAGCCCAGAATCTCAGTAGCAGAGAGCTGCCAGGGTGCCTACTGCAAAAAAAACCTC  
AAACAAACAGAAGTAGGGAGGTGAAAATAAAGTGTAGGGGGTGGAAATTAAAGCTGATGT  
GGACTTCCAATAAAGTTACCTTTAGATAACCTATTAAATCAATAGCATAGACCTGAAA  
CTGTCTATCAGAAAATGTGCTATTCTGAGGAAGGAGTGCTAACGAGGTCTGTGAGGGG  
GGCCTCTGGCTTGGAGAGGGTGTACCATCACATAAGACTCCTAAAAGCACATACTTTAT  
AAATTCAACATGAGCTTAACATCTTCTGTCATTGCGACTGAGCCATGGAGTCTT  
TCGATGCTGACACCAATTCAACTGACCTACACTCACGGCTCTGTTCAACCCAAAGACA  
TTG] CTCATGGTCATTCTGGTCACTTGTCTATTGGACTGCTAGGCAATGGCTG  
GTGCTGTGGTAGCTGGTAAAGATGAAGACGACCGTGAACACAGTCTGGTCCCTCCAT  
CTCACCTGCCGATTCCCTGCTGCCTCCCTGCCCTCTGGCTCACCTGATT  
CTCCAAGGACACTGCCCTAT [GGCTTGTCTGTGCAAACATTATCCATCCATCATTAT  
TCTCAACATGTTGCCAGTGTCTCCTGTTACTGCCATTAGCCTGGACCGATGTCTGAT  
AGTACATAAGCCAATCTGGTGCCAGAACATCGAAACAGTGAAGAACGCCCTGCCATCTG  
TGGATGTGCTGGTGGTAGCCTTGTGATGTGTGCCCCGTATTGTATACCGTGTATCT  
GTCATTATGGACAATCGCAGTATATGTAGATAAATTGATTCTCCAGGTCAATATGA  
TTATTGGACTACGTGT] ACAAAACTAAGTCTACCAGAAAGCAATTCTACTGATAACTCCA  
CTGCTCAGCTAACTGGACATATGAATGACAGGTAGCTCCCTCTGTACAGGCAAGGG  
ATTACTTTGGACAGTTACCAACTGCCCTCCAGTCACAGCCTAACATCTCTGAAG  
ACTCATTCTCTAGATTCAAGCAAACCAACAAACCCATTATGGTGGAAAGCCTCTAATG  
TCCCTCACAGCCGCCGTACCCAGCGGTTCTGTTGAAGATCGTAATCCAATACACTGA  
ACGCTGACGCTTCTCTGCTCACACAGAACCTTCCACTGCTTAGGGTCAATT  
TATACCCCTATGATTTCCAGGGGATTATGTTGACCAATTCACTGATGACAATCATGTG  
CGACACCGCTGATGGCAATAACCATCACAGGCTGGTGGGGCTCCTGGTGCCGTTT  
TCATCATGGTAATTGTTACAGCCTCATCGTCTTCAGAATCGGAAACCAACTTCACCA  
AGTCTCGGAACAAACCTTCCGGTGGCTGTGGCTGTGGCACTGCTTTTATCTGCT  
GGACTCCATACCCTTGTGCGAGTCTGCTATTGATTACTGATCCAGAAAGTTCTTG  
GGGAAGCTGTGATGTCTGGGACACATGTCATTGCTTAGCATCTGCCAATAGTTGCT  
TCAACCCCTTCCTGTTGCTGATGCCCTCTGGGGAAAGACTTCTAGGAAGAAAGCAAGACAGTCTA  
TAAAGGGATTCTGGAAAGCAGCCTCAGCGAAGAGCTCACGCACTTACCAACTGTACCC  
AAGACAAAGCCTCTCAAAAGAACATATGAGTACAGATGTGTGAAGATGTGGCCCTG  
GGAACCTAAGCAGAGTCTCAGGTGAACAGTGTGATGGATGACATGTGAGCAGGACACTTTA  
GACAATTGCGACTCTCAGAGAAAGGTCTTATTGACATCAGCATCTGGAAACAT  
TAAAGATGCAAATTCAAGCCCCATCCCAGATGTGTTGACTCAGAATCTGGCCCATG  
GGACCAAGTGTAAACAGGCCCTTGTGTTCCATCAGTGTAAAGTTTACCTCATTTGGC  
TTAGTCTATCCCATCCCTGACTACACCAGTGTCAATGAATAACTTTTACATCTGTTTC  
AGTATTCTTTTCTCTAGCATCATCTAAACTCTAGTTGCTGATGGAAGGCTGCTCT  
TATTGTTCTGAATGGAAGATATTCAATTGTTACAGTTGTTGAGTGTGACAAGTGATT  
TTAAGTGGGAAAGAGACACAGTAAGAAAGATCTATGAAAGCAGGGAGTGTGAGTTA  
GAGTTGACAGAACACAGTGCCTAACGCCACTAAAGCAACTGAGATAATTCCAG  
TGTTCATGTGAGCAAGTGAGCACAGATAACACATAAACACTTCTACTCCTGGAGTGT  
TAGAAGTTGTAGCTGGAGCTC

**FIGURE 2A**

080806:030602

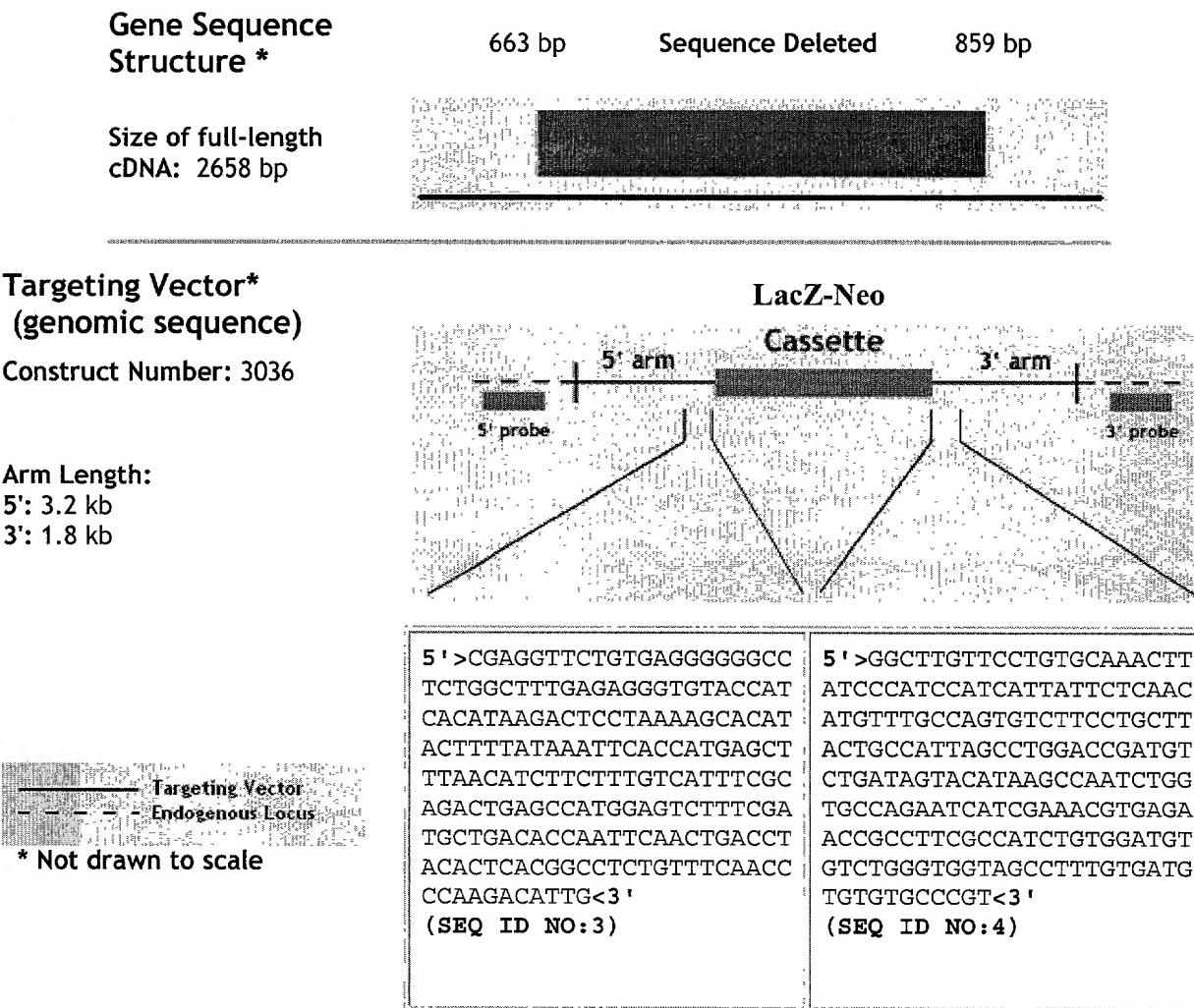
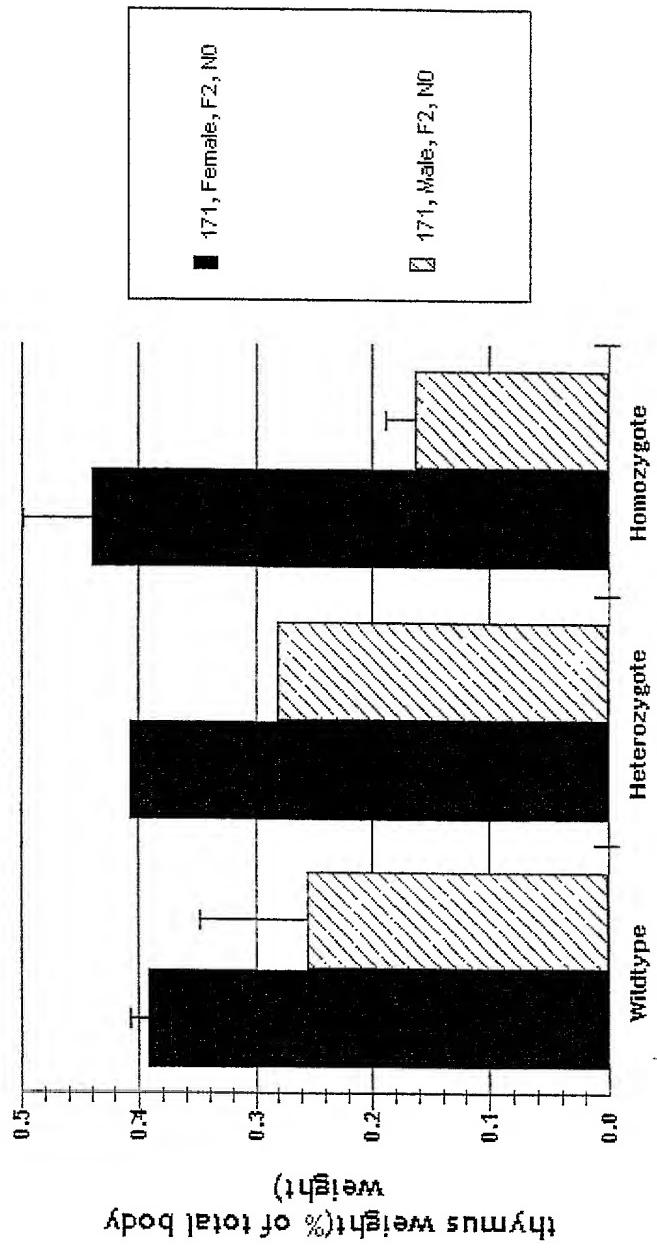


FIGURE 2B

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### necropsy - thymus weight/body weight



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**FIGURE 3**